



BACWA - BAAQMD Workshop Summary: Impact of Proposed Rule 11-18 on Bay Area Wastewater Treatment Facilities

Date: June 1, 2017
Time: 10 AM- 12 PM
Location: BAAQMD Office - 375 Beale Street, San Francisco, CA 94105
Attendees: Jaime Williams, Eric Stevenson, Sanjeev Kamboj, Victor Douglas, Carol Allen, Simrun Dhoot (BAAQMD); Dave Williams (BACWA ED); Nohemy Revilla (SFPUC); Chris Dembiczak (EBMUD); Randy Schmidt and Rita Cheng (CCCSD); Ken Davies and Jason Nettleton (San Jose); Mike Connor (EBDA); Amanda Roa (Delta Diablo); Courtney Mizutani (Mizutani Environmental), Sarah Deslauriers (Carollo)
Via phone: Stephanie Smallwood (Sunnyvale), Patrick Griffith (LACSD)

The purpose of the meeting was to address specific details of the proposed Rule 11-18 language that impact Publicly Owned Treatment Works (POTWs) in the Bay Area. The discussion was largely focused on modeling inputs and the impact of those inputs on POTW prioritization scores resulting from the screening level health risk assessments performed by BAAQMD. Notes below are provided by agenda item.

- 1) Health Risk Assessment Modeling
 - a. **Influent Flow and Concentration Data.** Confirmed and discussed that emissions factors in the BAAQMD database do not reflect current POTW influent concentrations or influent flow. For example, perchloroethylene is showing as a compound driving risk for several POTWs; however, the data used by BAAQMD is from the 1990s and does not reflect the fact that this compound is no longer in use by dry cleaners. Table 1 (attached) summarizes data from EBMUD, Palo Alto, and SFPUC and shows how BAAQMD assumptions on influent flow and concentrations (from the 1990s) differ from current influent flow and concentrations for various compounds. Table 3 (attached) shows the relative importance of specific Toxic Air Contaminant (TAC) compounds to each Phase 1 facility's prioritization score, and Table 4 (attached) shows the date of the most recent emission factors for specific TACS by facility used to estimate prioritization scores. Tables 3 and 4 informed the discussion and the importance for updating input data to ensure accurate estimates of the prioritization scores.

The list of compounds considered for the risk screening differs from the list of regularly sampled compounds at POTWs; additionally, many of the compounds included in routine sampling are not detected at POTWs. BAAQMD (Carol Allen) requested that POTWs (EBMUD and/or CCCSD) send the list of compounds for which they sample so she can compare that list with the full TAC List. BAAQMD (Sanjeev Kamboj) requested POTWs submit raw data for the past 5 years. Chris Dembiczak (EBMUD) suggested that, in order to provide context for BAAQMD, POTWs could review their data internally (removing outliers) and summarize the results for submission to BAAQMD, noting detection limits for compounds that are not detected. BAAQMD (Eric Stevenson) requested this data be sent to Brenda Cabral. BAAQMD stated they would not include compounds that are not observed/detected at POTWs in the risk modeling. BAAQMD (Eric Stevenson) also noted there would then need to be a policy-

level decision made regarding how to handle those compounds that are not observed/detected -- this is an issue that impacts other industries as well. BAAQMD (Carol Allen) will review OEHHA guidelines on this issue and history of compounds will be considered. **NOTE:** A similar evaluation was conducted when AB 2588 became effective, and the list of compounds considered for POTWS under that effort was very small relative to the full list of toxics under AB 2588.

- b. **Proximity Adjustment Factors.** The basis for determining the proximity or distance adjustment factors was discussed in depth and Table 2 (attached) was referenced during the discussion. The distance adjustment factor (as well as the screening level assessment) is intended to be ultra conservative. BAAQMD requested BACWA members evaluate the nearest distance from a source to an off-site worker and residential receptor for each facility and send the information to Carol Allen to update the factors used in the modeling. Using GoogleMaps is sufficient to show the location of the POTW (with the fence line) and measure the nearest distances from sources to receptors and is the preferred approach to present the information.
- c. **Emission Sources and Factors.** Other emission sources and factors (such as combustion) were discussed. BAAQMD (Carol Allen) commented that she felt the data for diesel particulate matter (DPM) was good (referencing information from SCAQMD and certified sources). She also commented that simple modifications, like increasing the stack height by 5 feet, would reduce risk significantly. BAAQMD (Eric Stevenson) asked that uncommon situations (outliers) be shared (like EBMUD's use of diesel at the cogeneration facility), and stated that BAAQMD is open to the idea of conducting source testing. These uncommon situations would be considered after the influent flow, influent concentration, and proximity distance factor data has been updated. BAAQMD (Carol Allen) also noted that for the purpose of modeling, the hours for maintenance and testing would be used, not the actual hours of emergency use.

In terms of looking at specific TACs, updating the influent data and proximity adjustment factor with current information is recommend as a first step, then BAAQMD is willing to consider additional source testing as necessary.

BAAQMD (Eric Stevenson) proposed the following approach:

1. POTWs update influent flow and concentration and proximity adjustment factors;
2. BAAQMD to rerun the screening level model to update prioritization scores;
3. If a "risky source" can be identified and the input data is determined to be out of date or unreliable, the BAAQMD will consider additional source testing.

Once the initial prioritization scores are re-evaluated, we will have a better idea about the path going forward.

- 2) The proposed rule 11-18 is scheduled to go to the Board for consideration in September 2017. BACWA received a letter from BAAQMD noting that all POTWs will be considered part of Phase

2. The original phases 3 and 4 no longer exist under the revised proposed Rule 11-18; those sources will either move to phase 2 or be addressed by other regulations.

3) Summary of **priority action items**:

- a) BACWA members to provide nearest distance from source to offsite worker and resident receptors. This information will be used by BAAQMD to update proximity adjustment factors for each facility. The data can be submitted to Sarah Deslauriers and Courtney Mizutani who will summarize the data, estimate the proximity adjustment factors by facility, and submit the information to BAAQMD (specifically, Carol Allen), so that BAAQMD modeling staff can process all at once.
- b) EBMUD and CCCSD to compile influent sampling data (from their LIMS) for the last five years (showing all non-detects), provide review of and format the data, and develop a list of typical TAC compounds routinely sampled (note frequency of sampling) to provide to BAAQMD staff. BAAQMD staff will use this information to determine a short-list of TACs that are relevant to POTWs for the purposes of Rule 11-18.
- c) Following the update to preliminary prioritization scores (i.e., completing action items a and b above), BACWA and BAAQMD staff to look to AB 2588 guidance on source test methods for the relevant compounds.
- d) BAAQMD staff and BACWA members to coordinate a meeting within the next two months to discuss progress on data collection and updates to prioritization scores for POTWs, next steps related to updating emission factors, and TBARCT cost-benefit.